<u>Amendments to the Claims</u>:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) Apparatus for monitoring multiple computing devices coupled to a network comprising:

a) a management computing device having software for monitoring multiple monitored computing devices that are coupled to a network, said management computing device including an aggregator component that accumulates information regarding the multiple monitored computing devices;

b) a video display for displaying a result from the aggregator component;

c) a plurality of monitored computing devices coupled to the management computing device by means of the network to enable information regarding the monitored computing devices to be determined by the aggregator component of said management computing device; and

d) ~~each of~~ said plurality of monitored computing devices implementing ~~a~~ schema for responding to one or more ~~ad-hoc~~ queries by <u>providing</u> the aggregator component ~~by providing an~~ <u>with at least one</u> access point<u>, which can be traversed</u> to <u>dynamically discover</u> information about ~~the monitored~~ <u>one or more associated</u> computing devices that satisfies the one or more ~~ad-hoc~~ queries<u>, based on one or more query triggering events defined in the schema</u>.

2. (original) The apparatus of claim 1 additionally comprising one or more client computing devices coupled to the management computing device by means of the network and wherein the video display is coupled to one of the client computing devices.

3. (previously presented) The apparatus of claim 1 wherein the schema includes a class hierarchy of managed elements and wherein an access point instance is created for each monitored computing device to provide a means of monitoring managed elements of an associated monitored computing device.

4. (original) The apparatus of claim 3 wherein a web element class is defined that is instantiated to include web elements contained within a monitored computing device.

5. (original) The apparatus of claim 1 wherein each of the monitored computing devices includes a data repository and wherein the schema defines a manner in which data is entered into the data repository when the monitored computing device is added to the network.

6. (currently amended) A method for monitoring and configuring multiple computing devices coupled to a network comprising:

a) providing a management computing device having software for monitoring multiple other computing devices, said management computing device including an aggregator component that accumulates information regarding the multiple other computing devices;

b) connecting a plurality of other computing devices to the management computing device by means of a network to enable the information regarding the other computing devices to be determined by the aggregator component of said management computing device;

c) accessing results provided by the aggregator and updating an output for conveying information about the multiple other computing devices based on a result from the aggregator component; and

d) maintaining a data repository on each of the other computing devices that is based on a monitoring and control schema for providing the aggregator component with at least one access point, which can be traversed to dynamically discover information about one or more associated computing devices that satisfies at least one ad~hoc query, based on to the aggregator component one or more query triggering events defined in the monitoring and control schema.

7. (previously presented) The method of claim 6 wherein the monitoring and control schema defines a class hierarchy of elements that depend from a base class and include the access point for examining elements for a given one of said other computing devices.

8. (original) The method of claim 7 wherein the monitoring and control schema defines elements that are associated with other elements by means of a containment association.

9. (original) The method of claim 7 wherein the monitoring and control schema defines elements that are related to each other by events transmitted to the aggregator component by a user interface.

10. (original) The method of claim 9 wherein the events are initiated by a client computing device coupled to the management computing device by means of a network connection.

11. (original) The method of claim 6 wherein the aggregator component accesses, in sequence, multiple other computing devices coupled to the network.

12. (original) The method of claim 6 wherein the monitoring and control schema is a class hierarchy of elements that depend from a base class and wherein the aggregator component associates one or more result elements with an event, and for each of said one or more result elements, the aggregator determines if the result element has an aggregate association with other elements.

13. (previously presented) The method of claim 12 wherein the aggregator component traverses multiple layers of elements to determine aggregate associations between elements.

14. (original) The method of claim 13 wherein for each element the aggregator component obtains data from a data property for that element and uses the data format property of said element to format data from the data property.

15. (previously presented) The method of claim 14 wherein the data property is a SQL string which the management component executes for an associated other computing device on the network.

16. (currently amended) A machine-readable medium having stored thereon a repository data structure for storing data corresponding to a schema for defining relations between objects of a server computing device coupled by means of a network to a management computing device, said repository data structure derived from a compilation of a managed object format language rendering of the schema, said rendering including:

a) a base class of type management element from which a plurality of classes are derived and which provides a̶n̶ at least one access point to instances of the derived classes, which can be traversed to dynamically discover information about one or more associated computing devices that satisfies the one or more queries, based on one or more query triggering events defined in at least one on event class derived from the base class;

b) a first derived class of the base class being at least two managed elements having e̶l̶e̶m̶e̶n̶t̶s̶ ̶w̶i̶t̶h̶ one or more attributes comprising a display format attribute defining a manner for presenting information at one or more client devices which is obtained by an aggregator component on the management computing device via the at least one access point and a display name attribute that identifies the information to be presented at the one or more client devices; and

c) a second derived class of the base class being ~~an~~ the at least one on event class that defines a source and result relationship between the at least two ~~objects of the type management element~~ managed elements having at least one particular result object being provided for at least one particular source object based on the aggregator component requesting the information via the at least one access point.

17. (previously presented) The repository data structure stored on the machine-readable medium of claim 16 additionally comprising a third derived class of the base class being an aggregate class that defines elements having a parent and child relation between instances of the management element type object.

18. (previously presented) The repository data structure stored on the machine-readable medium of claim 16 wherein the first derived class further includes a datatype field and a data field and wherein one type of datatype causes the data in the data field to be interpreted as a SQL statement.

19. (currently amended) A machine readable medium including instructions stored thereon, which when executed by at least one processing system, causes the at least one processing system to perform a method for monitoring multiple computing devices coupled to a network, said medium including instructions for:

a) providing an aggregator component on a management computing device that accumulates information regarding a multiple number of other computing devices;

- 7/28 –

b) obtaining the information regarding the other computing devices for use by the aggregator component of said management computing device;

c) updating an output for conveying information about the multiple other computing devices based on a result from the aggregator component; and

d) said obtaining step performed by instructions that access data from a data repository implemented on ~~each of~~ the other computing devices that is based on a monitoring and control schema for responding to one or more queries by providing ~~information that satisfies at least one ad-hoc query to~~ the aggregator component with at least one access point, which can be traversed to dynamically discover information about one or more associated computing devices that satisfies the one or more queries, based on one or more query triggering events defined in the schema.

20. (previously presented) The machine readable medium of claim 19 wherein the monitoring and control schema defines a class hierarchy of elements that depend from a base class which the aggregator component accesses by means of the access point for examining elements for a given one of said other computing devices.

21. (previously presented) The machine readable medium of claim 20 wherein the monitoring and control schema defines elements that are associated with other elements by means of a containment association.

22. (original) The machine readable medium of claim 20 wherein the monitoring and control schema defines elements that are related to each other by events transmitted to the aggregator component of the management computing device by means of a user interface component of said management computing device.

23. (original) The machine readable medium of claim 19 wherein the aggregator component accesses, in sequence, multiple other computing devices coupled to the network.

24. (original) The machine readable medium of claim 19 wherein the monitoring and control schema is a class hierarchy of elements that depend from a base class and wherein the aggregator component associates one or more result elements with an event, and for each of said one or more result elements, the aggregator determines if the result element has an aggregate association with other elements.

25. (original) The machine readable medium of claim 19 wherein for each element the aggregator component obtains data from a data property for that element and uses the data format property of said element to format data from the data property.

26–27 (cancelled).

28. (currently amended) A machine readable medium including instructions stored thereon, which when executed by at least one processing system, causes the at least one processing system to perform a method for

- 9/28 –

monitoring multiple computing devices coupled to each other by means of a network, said medium including instructions for:

a) monitoring multiple computing devices by providing an aggregator component on a management computing device that accumulates information regarding multiple other computing devices;

b) obtaining the information regarding the other computing devices for use by the aggregator component of said management computing device;

c) generating a visual output for conveying information about the multiple other computing devices based on a result from the aggregator component formatted according to data maintained on a data repository implemented on each of the other computing devices that is based on a monitoring and control schema for responding to at least one query by providing the aggregator component with at least one access point, which can be traversed to dynamically discover the information about the other computing devices that satisfies the at least one ad-hoc query to the aggregator component, based on one or more query triggering events defined in the monitoring and control schema; and

d) monitoring inputs from a user interface to enable the management computer to update data stored in the data repository of one or more of said other computer devices.

29. (original) The machine readable medium of claim 28 wherein each of the other computing devices includes different types of managed elements and wherein instructions implementing the aggregator component obtains data from a data property for a managed element and uses the data format property of said managed element to format data for presentation on the visual output.

30. (previously presented) The machine readable medium of claim 28 wherein the monitoring and control schema defines a class hierarchy of managed elements that depend from a base class and include the access point and wherein the medium includes instructions enabling the aggregator to examine elements within the hierarchy for a given one of said other computing devices.

31. (original) The machine readable medium of claim 30 wherein the monitoring and control schema defines managed elements that are associated with other managed elements by means of a containment association and wherein the instructions that implement the aggregator component examine in a recursive manner managed elements contained within other managed elements.

32. (original) The machine readable medium of claim 28 wherein the monitoring and control schema stored on the other computing devices defines managed elements that are related to each other by an on event association between managed elements and where an event is initiated at the

user interface and evaluated by the aggregator component of said management computing device.

33. (original) The machine readable medium of claim 28 wherein the monitoring and control schema is a class hierarchy of managed elements that depend from a base class and wherein the aggregator component associates one or more result managed elements with an event, and for each of said one or more result managed elements, the aggregator determines if the result managed element has an aggregate association with other managed elements.

34. (currently amended) At least one network management component embodied in at least one machine-readable medium as one or more instructions stored thereon, which when executed by at least one processing system, monitors for monitoring at least one network resource component, the at least one network management component comprising:

at least one aggregator module that makes at least one ad-hoc query for status information related to the at least one network resource component via at least one access module which is derived from schema implemented by the at least one network resource component, which the at least one aggregator uses to dynamically discover information about one or more associated network resource components to satisfy the at least one query, in response to the schema being made accessible to the at least one aggregator module based on one or more query triggering events.

35. (currently amended) At least one network resource component embodied in at least one machine-readable medium as one or more instructions stored thereon, which when executed by at least one processing system, ~~that~~ makes status information related to the at least one network resource component available to at least one network management component, the at least one network resource component comprising:

at least one status module that obtains the status information for satisfying at least one ~~ad-hoc~~ query from the at least one network management component requesting the status information; ~~and~~

at least one access module derived from schema implemented by the at least one network component that can be referenced by the at least one network management component for making the at least one ~~ad-hoc~~ query and for dynamically discovering the status information related to one or more of either the at least one network resource component or at least another associated network resource component; and

at least one query event module derived from the schema implemented by the at least one network management component that can identify any network resource component for which the status information can be made accessible via the at least one access module and that can describe one or more events which trigger the at least one status module to obtain the status information for satisfying the at least one query.